

Mineral Industry Surveys

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BISMUTH IN THE SECOND QUARTER 1999

Bismuth consumption decreased 4% in the United States during the second quarter of 1999, when compared to the first quarter. As is often the case, results were mixed on a sector-by-sector basis. Chemicals and metallurgical additives decreased 13% and 10% respectively, but bismuth alloys increased 8%. Compared to the second quarter of 1998, total consumption decreased 9%, with decreases in chemicals and additives but with a 15% increase in bismuth alloys.

The New York dealer price for bismuth, as published in Platt's Metals Week, began the quarter at \$3.40 per pound, increased to \$3.75 per pound in May, and fell back to \$3.70 per pound at the end of the quarter.

Imports increased to 188 metric tons in April and fell to 133 tons in May. Trade data for June were not available at the time of publication of this report. Based on the first 5 months of 1999, total imports for the year (at the current pace), would be about 1,900 metric tons, a significant drop compared to 1998.

Several independent factors appeared to be influencing the bismuth market. The United States, a major consumer, is entirely dependent on imports or private stocks for new material.

Decreases in bismuth production in Peru stemmed from a switch from high bismuth-containing concentrates to high silverand gold-containing concentrates in an attempt to maintain profits in the face of dire conditions in the world copper market by producing a higher value byproduct (Mining Journal, 1999a). Bismuth production in Mexico could be cut from 800 metric tons to 500 metric tons owing to efforts to reduce pollution (Mining Journal, 1999c). Since these are two important suppliers to the United States, these factors tend toward causing price increases even though domestic consumption fell slightly during the quarter. The reluctance of domestic buyers to become dependent on Chinese bismuth, in spite of its availability at relatively low prices, and the fact that traders appeared to be reducing their stocks, combined to form a "ceiling" for domestic bismuth prices (Mining Journal, 1999b). This stock reduction may also be a factor in the decrease in imports in spite of fairly steady demand.

Update

By July 30, the New York dealer price for bismuth had decreased slightly to \$3.65 per pound.

References Cited

Mining Journal, 1999a, Minor metals run out of steam: Mining Journal, v. 332, no. 8526, April 9, p. 267.

——1999b, Cobalt dominates minor metals: Mining Journal, v. 332, no. 8535, June 11, p. 445.

———1999c, Minor metals slow down: Mining Journal, v. 333. no. 8539, July 9, p.

TABLE 1 SALIENT BISMUTH STATISTICS 1/

(Kilograms, unless otherwise specified)

			1999	
	1998 p/	First quarter	Second quarter	Year to date
Consumption	1,990,000	505,000	483,000	987,000
Exports 2/	245,000	74,900	NA	NA
Imports for consumption	2,720,000	472,000	NA	NA
Price per pound, dealer, end of period	\$3.15	\$3.40	\$3.70	XX
Stocks, end of period, consumer	175,000	140,000	192,000	XX

p/ Preliminary. NA Not available. XX Not applicable.

 ${\bf TABLE~2}$ BISMUTH METAL CONSUMED IN THE UNITED STATES, BY USE 1/

(Kilograms)

		1999			
Use	1998 p/	First quarter	Second quarter	Year to date	
Chemicals 2/	884,000	213,000	185,000	398,000	
Bismuth alloys	741,000	191,000	207,000	399,000	
Metallurgical additives	335,000	92,200	83,000	175,000	
Other	32,000	8,000	7,000	15,000	
Total	1,990,000	505,000	483,000	987,000	

p/ Preliminary.

^{1/} Data are rounded to three significant digits.

^{2/} Comprises bismuth metal and the bismuth content of alloys and waste and scrap.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes industrial and laboratory chemicals, cosmetics, and pharmaceuticals.

 $\label{eq:table 3} \textbf{U.S. IMPORTS FOR CONSUMPTION OF BISMUTH METAL} \ , \textbf{BY COUNTRY} \ 1/$

(Kilograms)

	1998			1999 2/		
Country	Year total	March	First quarter	April	May	Year to date
Belgium	739,000	57,500	178,000	52,600	38,800	270,000
Canada	155,000	1,700	7,310	6,960	10,700	25,000
China	385,000	3,810	61,700	51,200	49,000	162,000
Germany	45,400				1,000	1,000
Italy	850	400	400			400
Japan	1,200	320	520			520
Mexico	807,000	6,800	72,600	26,300		99,000
Netherlands	295	920	1,500	266	85	1,860
Peru	68,800					
Russia	19,200					
Spain	400					
Switzerland				86		86
Taiwan	1,440					
United Kingdom	492,000	64,100	149,000	50,300	33,600	233,000
Total	2,720,000	136,000	472,000	188,000	133,000	793,000

 $^{1/\}operatorname{Data}$ are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

 ${\it TABLE~4} \\ {\it U.S.~EXPORTS~OF~BISMUTH~METAL,~ALLOYS,~AND~WASTE~AND~SCRAP,~BY~COUNTRY~1/} \\$

(Kilograms, metal content)

	1998	1999				
Country	Year total	March	First quarter	April	May	Year to date
Argentina	40			-		
Australia	17	41	41			41
Belgium	84,200		26,800		818	27,600
Canada	80,000	9,560	37,200	301	736	38,200
China	1,310					
Dominican Republic	2,400	161	256		246	502
Finland	1,140					
Germany	32,100	65	65			65
Hong Kong		7,220				7,220
Israel	696		7,220			
Korea, Republic of	150					
Malaysia	5,970					
Mexico	5,190				109	109
New Zealand		50	50			50
Philippines	210					
Saudi Arabia	50					
Singapore	5,470		350			350
Taiwan	1,610		40		6	46
Trinidad and Tobago			2,000	4,490	4,230	10,700
United Kingdom	24,300		874			874
Total	245,000	17,100	74,900	4,790	6,140	85,800

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{2/} June data not available at the time of publication.

^{2/} June data not available at the time of publication.